Gravatt, Dan

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Sent: Thursday, June 05, 2014 9:59 AM
To: Gravatt, Dan
Subject: USACE Updated comments (UNCLASSIFIED)
Attachments: WLLF Pre Construction Work Plan - USACE Comments- June 5 2014.xlsx

Classification: UNCLASSIFIED
Caveats: FOUO

Dan - see attached updated USACE comments. They have been adjusted to remove duplicated comments.

Thanks,
Robyn

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West Lake Landfill Superfund Site
Work Plan for Removal Action: Pre-Construction Work Plan Dated May 16, 2014
USACE Review Comments - 5 June, 2014

Comment #	Document	Reference: Section/ Paragraph/ Appendix	Commentor	Comment	Critical Issue Y/N
1	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2	Donakowski	"Background" not well defined in the document. Should either reference established background from past activities or discuss establishment of a reference area prior to scanning	N
2	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2	Donakowski	"Above background" can be a nebulous term. Suggest using more definitive action level such as instrument MDC, instrument critical level, instrument readings at levels above 95% UCL of established reference area, etc. Often background is taken as the average of background measurements, which can lead to situations where 50% of measurements are "above" background even though they are consistent with expected background readings.	N
3	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2	Donakowski	To note, in past discussion it appears UMTRCA 5.0 pCi/g total thorium has been established as the "free release" criteria. As such even an "above background" measurement may still meet the release criteria.	N
4	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2	Donakowski	Soil sampling requirements are not discussed. Will soil samples be collected? If so, there should be some discussion of sample frequency, bias sample identification, duplicate frequency, sample depth, etc.	N
5	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2	Donakowski	Provide clarification regarding the the purpose of placing a layer of rock over areas of elevated gama. Is it an engineered control to prevent speard of contamination or to provide shielding for workers? If significant contamination is encountered that requires contamination control or shielding, it is recommended the work plan should include re-evaluation of the barrier location in order to avoid the impacted area rather than attempt to place a temporary barrier/shield.	N
6	Work Plan	Air Monitoring Sampling, and QA/QC, Sec. 2.4	Donakowski	Table 1 lists collection frequency for alpha track detectors as semi-annual. Recommend deploying multiple sets of detectors, one set to be left for annual monitoring and one set to be switched out quaterly, rather then semi-annually, to coincide with the collection of TLD badges. Note - Air monitoring plan states alpha track etch detectors are to be exchanged quaterly. If in error, reconcile these two. Quaterly change out is preferable.	N
7	Work Plan	Air Monitoring Sampling, and QA/QC, Sec. 2.4	Donakowski	The reviewer is not familiar with the Inspect USA alpha track detectors, but with some alpha track vendors it is possible to purchase detectors with a thoron (i.e. radon 220) filter. Recommend deployment of both unfiltered and thoron filtered alpha track detectors. A significant difference in colocated filtered and unfiltered detectors would suggest thoron, though short lived, is a significant driver of total radon levels. This is important to ensure that reported radon-222 results are not biased high due to radon-220 contribution and to determine whether radon-220 and its decay products are present at levels that could cause it to become a constiuent of concern.	N
8	Air Monitoring, Sampling, and QA/QC Plan	Appendix B	Donakowski	General question regarding air monitoring and not necessarily a comment directly related to the preconstruction activities - is radon flux from the surface of the disposal areas conducted? UMTRCA has limits of 20 pCi/m^2/s. If surface flux monitoring is performed, it may be helpful to include a discussion of that activity as well.	N
9	Radiation Safety Plan	4.1, Appendix D	Donakowski	Are there locations where dose rates in excess of 2 mrem/hr exist? If so, is work planned in these areas? Recommend a map of radiologically restricted areas, if they exist, be included in the work plan.	N
10	Work Plan	Identification of Waste Staging, Management, & Relocation Areas, Sec 2.1	Conroy	Recommend the designers take a closer look at the bottom width of the proposed excavation to aid the excavation of the isolation barrier. Although the proposed bottom width of 45-feet would be just wide enough to accommodate an excavation machine wielding a clamshell, it may not be wide enough to allow support vehicles to pass behind the excavating machine. This configuration assumes the machine is orientated at a 90-degree angle to the excavation centerline and that the centerline is located at an edge of the proposed excavation. If the excavation must be made wider than 45-feet at the base, the excavated quantities will be larger and more disposal area may need to be identified.	N
11	Work Plan	Identification of Waste Staging, Management, & Relocation Areas, Sec 2.1	Conroy	The disposal area for any encountered RIM is not identified. The plan only states that RIM will be disposed of in an "approved manner". An area for disposal of RIM encountered in the excavation must be identified. Recommend including a figure outlining the areas designated for disposal.	N

12	Work Plan	Identification of Waste Staging, Management, & Relocation Areas, Sec 2.1	Conroy	Excavation of a slurry trench is very messy. Slurry used to support the side walls of the excavated trench will splash from the trench, drip from the clamshell, and drip out of the dump trucks used to haul the excavated wastes to the previously identified disposal areas. The equipment will track the wet slurry around the site. Strongly recommend the designer consider building a concrete work surface on the bottom of initial excavation. This work surface would include guide-walls to control the vertical and horizontal alignment of the trench. The work surface will also include curbing to contain the slurry and prevent it from running off of the site. The inclusion of this concrete work surface will increase the proposed width and depth of the proposed excavation to aid the excavation of the isolation barrier.	N
13	Work Plan	Vegetation and Surface Obstacle Clearing, Sec 2.2	Conroy	The plan states that the process for clearing and vegetation management will follow the previously approved processes utilized for the 2013 fence construction and 2013 GCPT Investigation. Does this process include the removal of the root balls under trees that are felled as part of the vegetation control? Or is this type of "grubbing" unnecessary for this work? Recommend including the previously approved processes in an Appendix so all work plans associated with pre construction are inclusive in this document.	N
14	Work Plan	Litter Control Barriers, Sec 2.5	Conroy	The plan describes four dozer moveable litter control units that are each 20-feet wide lined with litter control netting. These will be located within 50-feet of the active excavation. Four of these moveable units will only provide protection for slightly more than an 80-foot wide active excavation face. Paragraph 2.1 of this plan describes the proposed excavation to aid the excavation of the isolation barrier to be "approximately 20 feet in depth, 45 feet across at the base and will have slopes of 3 horizontal to 1 vertical (3:1)". These dimensions describe an excavation that is 165-feet wide at the top. Four 20-foot wide, dozer moveable, litter control units may not be sufficient to capture all litter emanating from an excavation of this magnitude. The plan should include provision to mobilize additional litter control units if the original four are observed to be ineffective.	N
15	Work Plan	Litter Control Barriers, Sec 2.5	Conroy	Figure 4 in the work plan shows the location of a 900-foot long litter barrier located along St. Charles Rock Road. The plan should include provision to increase the length of this litter barrier, or erect another portion of it in an additional alignment, if this initially proposed 900-foot long barrier is observed to be significantly ineffective at capturing all windblown litter.	N
16	Work Plan	Identification of Waste Staging, Management, & Relocation Areas, Sec 2.1	Kiefer	3rd paragraph references an appropriate unit. Work Plan should provide parameters and range of criteria that better identifies what would be considered an appropriate subsurface unit.	N
17	Work Plan	Identification of Waste Staging, Management, & Relocation Areas, Sec 2.1	Kiefer	Paragraph 7 states, "if RIM is encountered, this waste will be disposed in an approved manner and not disposed in the relocation areas." Work plan should outline what that "approved manner" will be.	Y
18	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2	Kiefer	Paragraph 4 references process utilized for 2013 fence construction and 2013 GCPT investigation will be used. Recommend that process be included as an appendix to this Work Plan so all documents are together in one document.	N
19	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2	Kiefer	Paragraph 4 references that moisture may be added to the vegetation during brush hog and chipping operations if the natural moisture is insufficient to suppress dust. Work Plan should identify how you will determine that the natural moisture is insufficient to suppress dust.	N
20	Work Plan	Air Monitoring Sampling, and QA/QC, Sec. 2.4	Kiefer	Paragraph 4 states that the meterological station will be placed on top of the landfill office if the roof condition is adequate. Please specify alternate location in the event the roof is not adequate to hold the equipment.	N
21	Work Plan	Table 2, Schedule	Kiefer	Recommend that a more definitive schedule be provided for clearing of vegetation and surface obstacles. Example: Clearing of vegetation and surface obstacles will be completed within 30 days of approval of IB Design.	N
22	Bird Monitoring Plan	Appendix A, Para 1.0	Bass	The Summary Report dated March 18, 2014 located in Appendix A, paragraph 1.0 of the Bird Hazard Monitoring and Mitigation Plan references 2 letters from the St. Louis Airport's Counsel that provided concepts and comments that were recommended to be put into the ongoing monitoring plan. USACE has not been provided with those letters, so it cannot be verified if the recommended controls impact the limited clearing work to be completed during pre construction activities. Please provide copies of those letters so verification can be performed.	N
23	Work Plan	Identification of Waste Staging, Management, & Relocation Areas, Sec 2.1, 4th Para, pg 3	Speckin	The 3rd sentence indicates any excavated material that will be excavated below the April 6, 1975 surface will be given preference for relocation to the SE corner Area 1. Does this mean that North Quarry landfill material placed after April 6, 1975 will be given preference for relocation in SE corner of Area 1 or material placed prior to April 6, 1975...which it is assumed would be the original Area 1 landfill prior to overlay of the North Quarry Material. If the latter, it appears the sequence of excavation may make this difficult since North Quarry Landfill material would be excavated first, followed by the Area 1 material. Please clarify.	N

24	Work Plan	Identification of Waste Staging, Management, & Relocation Areas, Sec 2.1, 4th Para, pg 3	Speckin	The 4th sentence discusses the potential for placement of excavated material on the North Quarry Landfill. The summary of the Air Monitoring Plan indicates anticipated construction activities may require relocation of the air monitoring stations. Are the current proposed air montitoring station locations suitable if material placement is required on the North Quarry Landfill?	N
25	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2, 4th Para, pg 5	Speckin	It appears that the precautions during clearing described in this paragraph will only be necessary if surface RIM is discovered in the gamma scans described in the prevous two paragraphs. Although it may already be planned, it is recommended that any areas identified as containing RIM be cordoned off so there is a visual demarcation of areas to avoid or where extra precautions need to be taken. As this paragraph is currently written it is uncertain if there will be a visual demarcation or if it will simply be a Rad Tech guiding those performing the clearing.	N
26	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2, 4th Para, pg 5	Speckin	Last sentence suggests that clearing and addressing gamma areas above background will be the first step before other activities occur. It uses "installation of air monitoring equipment" as an example of activities that will occur after addressing the gamma areas. However, it appears part of the process of addressing the gamma involves clearing and potential ground disturbance. Does the air monitoring network need to be in-place prior to these activities or is a more localized air monitoring program planned?	N
27	Work Plan	Air Monitoring Sampling, and QA/QC, Sec. 2.4, 2nd Para, pg 7	Speckin	This paragraph indicates that air monitoring stations may need to be relocated due to availability or restrictions on the delivery of electric power to each location. USACE has had good luck with the use of solar powered air monitoring stations under similar circumstances, so that may be an option to consider if it becomes an issue.	N
28	General	Odor Control	Speckin	It was not indicated that a separate odor control plan was going to be developed for this site. However, odor control is discussed in association with the Bird Mitigation Plan. Since odor control appears to be a significant factor in mitigating bird issues, are the odor control measures to be implemented as part of the Bird Mitigation Plan considered sufficient to address odor issues affecting the public?	N
29	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2, 2nd Para	Kiefer	States that topsoil and grassy areas from OU-1 will be stockpiled near N. Quarry Landfill crown area with silt fencing to prevent erosion. Please specify how potential blowing dust from that stockpile will be minimized.	N
30	Work Plan	Vegetation & Surface Obstacle Clearing, Sec 2.2, 4th Para	Kiefer	States that the process for clearing and vegetation management will follow previously approved processes utilitzed for the 2013 GCPT investigation. This section includes some language verbatim from the 2013 GCPT work plan, but not all. To ensure there is no confusion as to what will be done and to prevent the need to reference multiple work plans, it is recommended that the few paragraphs of the 2013 GCPT work plan that apply to the pre-construction work be incorporated into Sec 2.2 of the pre-construction work plan.	N
31	Radiation Safety Plan	Appendix	Kiefer	Personnel, tools, and equipment used for clearing areas of OU-1 that are impacted with surface RIM will require an equipment exit survey in accordance with section 5.3.5. The work plan should include a figure showing the exist survey area for pre-construction activities.	Y